

## APPLICATIONS:

If your job is to find faults on telephone twisted pair cable, the Tempo TelScout™ TS90 is built for you. Designed specifically for telephone local loop applications, the TS90 applies the newest technology to provide both ease of use and telephony performance that cannot be found in any other TDR.

The TS90 is designed for ease-of-use – you'll spend less time operating the TDR, and more time repairing faults. Simply select the cable type to be tested and the TS90 does the rest. Impedance, Vp, gain, pulse width, and vertical position are automatically selected and adjusted as you scan the cable. Just move the cursor to the fault to pinpoint its location.

On the performance side, the TS90 employs optimized pulsing and sampling, coupled with advanced filtering and signal processing techniques, to insure the maximum measurement range. That way, you'll always have a clean waveform for easier fault interpretation.

### Short Pulse Width

The TS90 provides a 5 ns pulse width for close-in resolution. Faults as near as 3 ft. from the pedestal can be located with ease.

### Rugged Package

Best of all, you get all this performance in a rugged handheld TDR package. Come snow, rain, heat, and humidity, the TS90 keeps working, because you have to



## FEATURES:

- Two Pair Test Capability
- One-Step Setup
- Automatic Instrument Control Mode
- 15 km (45,000 ft.) Fault Location Capability
- Splash and Drip Proof
- Single-Button Zoom Function
- Pair Comparison Mode
- Splits/Crosstalk Mode
- Intermittent Fault Location
- Measures Distance to Fault in Feet, Meters, or Time
- Configurable for Any Cable Type and Vp (0.300 to 1.000)
- Accurate ( $\pm 3$  ft. at 10,000 ft.)
- On-line Tutorials
- Large Backlit Display

# TelScout™ TS90 | TDR Cable Tester for Telephone Applications

## TelScout TS90 Characteristics

Test Signal Output – 1/2 Sine, balanced.  
 Amplitude – 16 V into 105 Ω.  
 Output Impedance – 105 Ω nominal.  
 Pulse Widths – 5 ns to 2,500 ns (automatic).  
 Input Protection – ±200 V, DC + peak AC, to a maximum of 440 Hz.  
 Maximum Range – 15,000 m (45,000 ft.) depending on cable type and condition.  
 Cursor Resolution – 0.4% of selected range.  
 Display – 5.25-in. high-contrast, high-resolution, backlit LCD, 520 x 200 pixels.

Display Ranges – Eleven automatic display ranges plus single-button expand window.  
 Filter – High pass, cutoff frequency 150 kHz, user selectable.  
 Amplifier – 5 mV reflection produces a full-screen vertical deflection.  
 Gain – 0 to 63 dB.  
 Horizontal Design Accuracy – 0.01% ± 300 ps ± Vp uncertainty ± cursor resolution.

## General Characteristics

### Environmental

Temperature –  
 Operating: 0° C to +45° C.  
 Non-operating: -20° C to +60° C.  
 Humidity – 95% RH, non-condensing.  
 EMI Emissions –  
 EN55011 class A.  
 EN60555-2.

### Power

Battery Operation –  
 Battery Type: Six AA Alkaline.  
 Operating Time: >4.5 hrs. with backlight off.  
 Battery Saver:  
 Selectable for 5 to 30 minutes or disabled.

### Physical

Dimensions	mm	in.
Height	141	5.6
Width	211	8.3
Depth	43	1.8
Weight	kg	lb.
Net	1	2.2

## Ordering Information

### TelScout TS90

Includes: Test Leads (two pair), Carrying Case, Alkaline Batteries (six), User Manual.  
 TS90 OPTIONAL ACCESSORIES  
 Rechargeable NiCad Battery Pack – THM5BAT.  
 External Charger for NiCad Battery Pack – THM5CHG.  
 Includes: DC Adapter, Charger Pedestal, and one of following wall transformers (specify when ordering):  
 Standard – 110 V US.  
 Opt. A1 – 220 V Universal Euro.  
 Opt. A2 – 240 V UK.  
 Opt. A3 – 240 V Australia.  
 Strand Hook (D-Ring) – 354074500.

### LANGUAGE OPTIONS

Standard – English.  
 Option L1 – French.  
 Option L3 – German.  
 Option L4 – Spanish  
 Option L6 – Portuguese/Spanish (Portuguese default).  
 Option LC – Czechoslovakian.  
 Option LD – Dutch/French (Dutch default).  
 Option LF – Finnish.  
 Option LS – Swedish.